

ABSTRACT OF THE DISCLOSURE

If a tool breakage occurs, a cutting time T and a maximum value (absolute value) G of a slope of a drop in a cutting load become small. A cutting load integrated value S increases as a tool wears and becomes small when the breakage occurs. Therefore, these values T , G , and S are obtained in a machining cycle, moving variable thresholds are obtained (updated) based on values T , G , and S obtained in a preceding machining cycle, and the thresholds and the values T , G , and S obtained in the current machining cycle are compared with each other to thereby determine an abnormal condition of the tool.